

REMARKS

The Applicants would like to thank the Examiner for the courtesy he extended to the undersigned during their conference call on November 18, 2002.

Applicants wish to note that a copy of Teytaud, U.S. Patent No. 4,219,249, was not provided to Applicants nor was it listed on Form PTO-892.

Claims 1-28 were originally presented in the application. Claims 1 and 15 were amended and claim 29 added by Applicants' Response dated July 12, 2002. By this amendment, claims 1-26 and 29 are amended and claims 27 and 28 are cancelled without prejudice. It is respectfully submitted that the pending claims define allowable subject matter. More specifically, claims 2-14 and 16-25 are amended to be consistent with amended claims 1 and 15 respectively.

Claims 1-3, 7-15, 18, 22-25 and 27 stand rejected under 35 U.S.C. §102(b) as being anticipated by Denovich et al., U.S. Patent No. 6,254,421 ("*Denovich*"). Claim 27 is cancelled without prejudice. Applicants traverse this rejection with respect to the remaining claims and respectfully submit that such pending claims are allowable.

It is respectfully submitted that *Denovich* does not disclose each element of claims 1-3, 7-15, 18 and 22-25. Claim 1 now recites "a connector comprising: a housing defining an interior channel and having two opposing sides, wherein said housing includes opposing first and second engagement surfaces defining at least one opening having at least one indent; and a crimping device movably positioned inside said housing and capable of securing at least one electrical cable in said channel; wherein the connector is capable of being removably connected to at least one other connector by an ultrasonic weld." *Denovich* does not teach or otherwise suggest "said housing includes opposing first and second engagement surfaces defining at least one opening having at least one indent", alone or in combination with the other claimed features. In fact, *Denovich* does not disclose each of the elements of claim 1 as amended, and therefore the rejection is respectfully traversed.

Claims 2-3 and 7-14, which depend directly or indirectly from independent claim 1, recite additional features and are believed allowable for all the reasons provided above with respect to claim 1.

Claim 15 now recites "a connector device capable of being used with an electrical cabling, said device comprising: a first connector having a housing and opposing sides; and a second connector having a housing and opposing sides; wherein at least one of said opposing sides of said first connector is removably connected to one of said sides of said second connector and further wherein said housing of at least one of said first and second connectors includes opposing first and second engagement surfaces defining at least one opening having at least one indent." *Denovich* does not teach or otherwise suggest "wherein said housing of at least one of said first and second connectors includes opposing first and second engagement surfaces defining at least one opening having at least one indent", alone or in combination with the other claimed features. In fact, *Denovich* does not disclose each of the elements of claim 15 as amended, and therefore the rejection is respectfully traversed.

Claims 18 and 22-25, which depend directly or indirectly from independent claim 15, recite additional features and are believed allowable for all the reasons provided above with respect to claim 15.

Claims 4-6 and 19-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Denovich*. Applicants traverse this rejection and respectfully submit that the pending claims are allowable. Claims 4-6, which depend indirectly from independent claim 1, recite additional features and are believed allowable for all the reasons provided above with respect to claims 1 and 3. More specifically, *Denovich* does not disclose "said housing includes opposing first and second engagement surfaces defining at least one opening having at least one indent" of claim 1; in combination with the "housing is formed of a nonconductive material" of claim 3 in further combination with: the "housing is formed of a polycarbonate material" as recited by claim 4, among other features; the "housing is formed of a polyester material" as recited by claim 5, among other

features; and the "housing is formed of a polypropylene material" as recited by claim 6, among other features.

Claims 19-21, which depend directly or indirectly from independent claim 15, recite additional features and are believed allowable for all the reasons provided above with respect to claim 15. More specifically, *Denovich* does not disclose "wherein said housing of at least one of said first and second connectors includes opposing first and second engagement surfaces defining at least one opening having at least one indent" in combination with: the " housings are formed of a polycarbonate material" as recited by claim 19, among other features; the " housings are formed of a polyester material" as recited by claim 20, among other features; and the " housings are formed of a polypropylene material" as recited by claim 21, among other features.

Claims 16-17, 26 and 28 stand rejected under 35 U.S.C. §103(a) as being anticipated by *Denovich* in view of Teytaud, U.S. Patent No. 4,219,249 ("*Teytaud*"). Claim 28 is rejected without prejudice. Applicants traverse this rejection with respect to the remaining claims and respectfully submit that such pending claims are allowable.

Claims 16 and 17, which depend directly from independent claim 15, recite additional features and are believed allowable for all the reasons provided above with respect to claim 15.

Claim 26 now recites "a connector stick device capable of being connected to at least two electrical cables using a crimping device, said connector stick device comprising: a plurality of connectors; each of said connectors having opposing sides; and wherein at least one of said opposing sides of each connector is removably connected to one of said opposing sides of a different connector by an ultrasonic weld, and further wherein said weld is capable of being broken during the connection of the at least two electrical cables." The references do not teach or otherwise suggest "said weld is capable of being broken during the connection of the at least two electrical cables", alone

or in combination with the other claimed features. Therefore the rejection is respectfully traversed.

The Office Action provides that "the recitation that an element is 'adapted to' perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison* 69 USPQ 138." (Office Action Page 6, lines 12-15). Applicants respectfully disagree.

It is respectfully submitted that the *In re Hutchison* holds that the use of the term "adapted for" is not a claim limitation in the patentable sense when used in the introductory clause (i.e., the preamble). It appears that the use of the term other than in the introductory clause would be a claim limitation in the patentable sense. However, claims 1, 2, 9, 10, 11, 13-15, 24-26 have been amended to delete the term "adapted".

With respect to claims 3 and 18, it is not Applicants' position that *Denovich* "does not show the housing being of nonconductive material..." as provided in the Office Action. (Office Action Page 6, line 17). Rather, it is Applicants' position that *Denovich* does not disclose all the features of claims 3 and 18 in combination with all the features of claims 1 and 15, from which claims 3 and 18 respectively depend.

With respect to claims 19-21, it is not Applicants' position that the *Denovich* "does not show the housing being formed of polycarbonate material, a polyester material, or a polypropylene material" as provided in the Office Action. (Office Action Page 7, lines 4-5). Rather, it is Applicants' position that *Denovich* does not disclose all the features of claims 19-21 in combination with the all the other features of claim 15 from which claims 19-21 depend, directly or indirectly.

The Office Action provides that "one cannot show nonobviousness by attacking references individually where the rejections are based on a combination of references." (Office Action Page 7, lines 11-13). It is respectfully submitted that Applicants only argued against the nonobviousness rejection by attacking references individually, where only individual references were cited

(i.e., the nonobviousness rejection of Claims 4-6 and 19-21). With respect to the nonobviousness rejection of claims 16-17, 26 and 28, Applicants argued that neither *Denovich* nor *Teytaud* taught the features of such claims.

The Office Action further provides that, with respect to the suggestion to combine the references, "there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art." (Office Action, page 7, lines 20-22 and page 8, line 1). It is respectfully submitted that the suggested combination of disclosures taken as a whole would not suggest the present invention, and thus there is no motivation to combine *Denovich* and *Teytaud* as provided by the Office Action.

As provided previously, *Denovich* discloses "a single board-mounting peg 144 minimal real estate of the circuit board is used; allowing several connectors assemblies 110, 110 to be positioned adjacent each other, side-by-side in a row" (Column 3, lines 46-50), while *Teytaud* discloses "an improvement to an ultrasonic welding process for bonding a metallic wire to one of the exterior sides of a metallic piece..." (Column 1, lines 41-43). It is respectfully suggested that the combination of references taken as a whole would suggest either: ultrasonically welding a wire to the connector assemblies 110; and/or ultrasonically welding peg 144 of the connector assemblies 110 to the circuit board. The suggested combination of references, taken as a whole, does not suggest the present invention, and thus there is no motivation to combine *Denovich* and *Teytaud* as provided by the Office Action.

In view of the foregoing, it is respectfully submitted that the pending claims define allowable subject matter, and places the claims in better form for consideration on appeal. Reconsideration and allowance is respectfully considered. Applicants further believe that a telephone interview would aid in the prosecution of this application. The Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Amendment to Serial No. 09/963,720
Confirmation Number 9296
September 26, 2001
Page 11 of 20 pages

Attached hereto is a marked-up version of the changes made to the specification and the claims by the current amendment. This attached page is captioned **"Version with Markings to Show Changes Made."** Furthermore, attached hereto is a clean set of all pending claims. This attached page is captioned **"Clean Set of All Pending Claims."**

Please charge any additional fees or credit overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Dated: November 18, 2002

Respectfully submitted,
McAndrews, Held & Malloy, Ltd.

by: 

Timothy L. Harney
Reg. No. 38,174
Attorney for Applicants

McAndrews, Held & Malloy, Ltd.
500 West Madison Street
Chicago, Illinois 60661
Telephone: (312) 775-8000

Version With Markings to Show Changes Made

In the Claims:

Claims 27 and 28 were cancelled without prejudice.

Claims 1-26 and 29 were amended as follows:

1. (Twice Amended) A connector comprising:

a housing defining an interior channel and having two opposing sides,
wherein said housing includes opposing first and second engagement surfaces
defining at least one opening having at least one indent; and

a crimping device movably positioned inside said housing and [adapted to
secure] capable of securing at least one electrical cable in said channel;

wherein the connector is [adapted to be] capable of being removably
connected to at least one other connector by an ultrasonic weld.

2. (Amended) The [telsplice] connector of Claim 1, wherein the
connector is [adapted to be] capable of being removably connected to said at
least one other connector on one of said two opposing sides.

3. (Amended) The [telsplice] connector of Claim 1, wherein said
housing is formed of a nonconductive material.

4. (Amended) The [telsplice] connector of Claim 3, wherein said
housing is formed of a polycarbonate material.

5. (Amended) The [telsplice] connector of Claim 3, wherein said
housing is formed of a polyester material.

6. (Amended) The [telsplice] connector of Claim 3, wherein said
housing is formed of a polypropylene material.

7. (Amended) The [telsplice] connector of Claim 3, wherein said housing is formed of at least two different materials.

8. (Amended) The [telsplice] connector of Claim 1, wherein said crimping device is positioned in said housing adjacent said channel.

9. (Amended) The [telsplice] connector of Claim 1, including a crimping portion [adapted to engage] capable of engaging said crimping device.

10. (Amended) The [telsplice] connector of Claim 9, wherein a lower surface of said crimping portion is [adapted to engage] capable of engaging an upper portion of said crimping device.

11. (Amended) The [telsplice] connector of Claim 1, wherein said [housing includes opposing first and second engagement surfaces defining] at least one opening fluidly [communicating] communicates with said channel and [adapted to receive] is capable of receiving said electrical cable.

12. (Amended) The [telsplice] connector of Claim 11, wherein said first and second engagement surfaces define a first pair of planes different from a pair of planes defined by said two opposing sides.

13. (Amended) The connector of Claim 9, wherein said crimping portion defines at least one opening fluidly communicating with said channel and [adapted to receive] capable of receiving said electrical cable.

14. (Amended) The [telsplice] connector of Claim 1, further including a connecting plate adjacent said channel and [adapted to provide] capable of providing an electrical connection between electric cables received therein.

15. (Twice Amended) A connector device [adapted to be] capable of being used with an electrical cabling, said device comprising:

a first connector having a housing and opposing sides; and

a second connector having a housing and opposing sides;

wherein at least one of said opposing sides of said first connector is removably connected to one of said sides of said second connector and further wherein said housing of at least one of said first and second connectors includes opposing first and second engagement surfaces defining at least one opening having at least one indent.

16. (Amended) The [telsplice stick] connector device of Claim 15, wherein said first and second connectors are removably connected by a weld.

17. (Amended) The [telsplice stick] connector device of Claim 15, wherein said first and second connectors are removably connected by an ultrasonic weld.

18. (Amended) The [telsplice stick] connector device of Claim 15, wherein said housings are formed of a nonconductive material.

19. (Amended) The [telsplice stick] connector device of Claim 18, wherein said housings are formed of a polycarbonate material.

20. (Amended) The [telsplice stick] connector device of Claim 18, wherein said housings are formed of a polyester material.

21. (Amended) The [telsplice stick] connector device of Claim 15, wherein said housings are formed of a polypropylene material.

22. (Amended) The [telsplice stick] connector device of Claim 15, where said first connector housing is formed of one nonconductive material and said second connector housing is formed of a second nonconductive material.

23. (Amended) The [telsplice stick] connector device of Claim 15, wherein a crimping device is positioned in each of said housings adjacent to a channel defined therein.

24. (Amended) The [telsplice stick] connector device of Claim 23, wherein said first and second connectors further include a crimping portion [adapted to engage] capable of engaging said crimping device.

25. (Amended) The [telsplice stick] connector device of Claim 24, further including a connecting plate adjacent to said channel and [adapted to provide] capable of providing an electrical connection between cabling received therein.

26. (Amended) A [telsplice] connector stick device [adapted to be] capable of being connected to at least two electrical cables using a crimping device, said [telsplice] connector stick device comprising:

a plurality of connectors;

each of said connectors having opposing sides; and

wherein at least one of said opposing sides of each connector is removably connected to one of said opposing sides of a different connector by an ultrasonic weld, and further wherein said weld is capable of being broken during the connection of the at least two electrical cables.

29. (Amended) A connector comprising:

a housing defining an interior channel and having two opposing sides, wherein said housing includes opposing first and second engagement surfaces defining at least one opening having at least one indent; and

a crimping device movably positioned inside said housing and
[adapted to secure] capable of securing at least one electrical cable in
said channel;

wherein the connector is [adapted to be] capable of being
connected to at least one other connector.

Clean Set of All Pending Claims

1. A connector comprising:

a housing defining an interior channel and having two opposing sides, wherein said housing includes opposing first and second engagement surfaces defining at least one opening having at least one indent; and

a crimping device movably positioned inside said housing and capable of securing at least one electrical cable in said channel;

wherein the connector is capable of being removably connected to at least one other connector by an ultrasonic weld.

2. The connector of Claim 1, wherein the connector is capable of being removably connected to said at least one other connector on one of said two opposing sides.

3. The connector of Claim 1, wherein said housing is formed of a nonconductive material.

4. The connector of Claim 3, wherein said housing is formed of a polycarbonate material.

5. The connector of Claim 3, wherein said housing is formed of a polyester material.

6. The connector of Claim 3, wherein said housing is formed of a polypropylene material.

7. The connector of Claim 3, wherein said housing is formed of at least two different materials.

8. The connector of Claim 1, wherein said crimping device is positioned in said housing adjacent said channel.
9. The connector of Claim 1, including a crimping portion capable of engaging said crimping device.
10. The connector of Claim 9, wherein a lower surface of said crimping portion is capable of engaging an upper portion of said crimping device.
11. The connector of Claim 1, wherein said at least one opening fluidly communicates with said channel and is capable of receiving said electrical cable.
12. The connector of Claim 11, wherein said first and second engagement surfaces define a first pair of planes different from a pair of planes defined by said two opposing sides.
13. The connector of Claim 9, wherein said crimping portion defines at least one opening fluidly communicating with said channel and capable of receiving said electrical cable.
14. The connector of Claim 1, further including a connecting plate adjacent said channel and capable of providing an electrical connection between electric cables received therein.
15. A connector device capable of being used with an electrical cabling, said device comprising:
 - a first connector having a housing and opposing sides; and
 - a second connector having a housing and opposing sides;wherein at least one of said opposing sides of said first connector is removably connected to one of said sides of said second connector and

further wherein said housing of at least one of said first and second connectors includes opposing first and second engagement surfaces defining at least one opening having at least one indent.

16. The connector device of Claim 15, wherein said first and second connectors are removably connected by a weld.

17. The connector device of Claim 15, wherein said first and second connectors are removably connected by an ultrasonic weld.

18. The connector device of Claim 15, wherein said housings are formed of a nonconductive material.

19. The connector device of Claim 18, wherein said housings are formed of a polycarbonate material.

20. The connector device of Claim 18, wherein said housings are formed of a polyester material.

21. The connector device of Claim 15, wherein said housings are formed of a polypropylene material.

22. The connector device of Claim 15, where said first connector housing is formed of one nonconductive material and said second connector housing is formed of a second nonconductive material.

23. The connector device of Claim 15, wherein a crimping device is positioned in each of said housings adjacent to a channel defined therein.

24. The connector device of Claim 23, wherein said first and second connectors further include a crimping portion capable of engaging said crimping device.

25. The connector device of Claim 24, further including a connecting plate adjacent to said channel and capable of providing an electrical connection between cabling received therein.

26. A connector stick device capable of being connected to at least two electrical cables using a crimping device, said connector stick device comprising:

a plurality of connectors;

each of said connectors having opposing sides; and

wherein at least one of said opposing sides of each connector is removably connected to one of said opposing sides of a different connector by an ultrasonic weld, and further wherein said weld is capable of being broken during the connection of the at least two electrical cables.

29. A connector comprising:

a housing defining an interior channel and having two opposing sides, wherein said housing includes opposing first and second engagement surfaces defining at least one opening having at least one indent; and

a crimping device movably positioned inside said housing and capable of securing at least one electrical cable in said channel;

wherein the connector is capable of being connected to a at least one other connector.